

3(Amended). A process as claimed in claim 1, wherein the aluminium containing compound comprises aluminium chloride, aluminium nitrate, aluminium sulphate, alumina and/or boehmite.

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4(Amended). A process as claimed in claim 1, wherein the barium containing compound comprises barium chloride, barium sulphate and/or barium nitrate.

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5(Amended). A process as claimed in claim 1, wherein the mixture comprising aluminium and barium containing compounds is in the form of a substantially homogeneous precipitate.

9(Amended). A process as claimed in claim 6, wherein the salt solution further includes a dispersant, such as polyvinylpyrrolidone.

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10(Amended). A process as claimed in claim 1, wherein the mixture in step (a) is formed by adding a solution comprising oxalic acid and a water soluble barium compound, preferably barium nitrate, to an aqueous slurry comprising boehmite.

11(Amended). A process as claimed in claim 1, wherein heating of the mixture in step (b) is achieved by a hydrothermal process.

13(Amended). A process as claimed in claim 11, wherein the hydrothermal treatment is carried out at a pressure in the range of from 1 to 150 bar, preferably from 5 to 50 bar.

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14(Amended). A process as claimed in claim 11, wherein the hydrothermal treatment is carried out for a time in the range of from 30 minutes to 25 hours, preferably from 1 to 10 hours.

15(Amended). A process as claimed in claim 1, wherein the mixture in step (b) is heated at a temperature in the range of from ambient temperature to boiling temperature, preferably by a reflux process.

16(Amended). A process for the preparation of a stabilized alumina catalyst support material, which process comprises the steps of:

- (i) providing a precursor material comprising particles of boehmite at least partially coated with a layer comprising a compound of barium, wherein the precursor material is produced according to a process as claimed in claim 1; and
- (ii) heating the coated particles of boehmite to a temperature at which least some of the boehmite transforms to gamma-alumina.

18(Amended). A process for the preparation of an automotive catalytic converter, which process comprises the steps of:

- (i) providing a precursor material comprising particles of boehmite at least partially coated with a layer comprising a compound of barium, wherein the precursor material is produced according to a process as claimed in claim 1;
- (ii) dispersing a mixture comprising said precursor material on a metal or ceramic monolithic substrate; and
- (iii) heating said mixture comprising said precursor material to a temperature at which at least some of the boehmite transforms to gamma-alumina.

20(Amended). A process as claimed in claim 16, wherein heating is carried out at a temperature in the range of from 500 to 1000°C.

21(Amended). A process as claimed in claim 17, wherein the further heating is carried out at a temperature in the range of from 1000 to 1400°C.

22(Amended). A process for the preparation of a catalyst, such as an automotive catalytic converter, which process comprises the step of dispersing a stabilized alumina

catalyst support material prepared according to the process of claim 16 on a metal or ceramic monolithic substrate.

A₆ 27(Amended). A stabilized alumina catalyst carrier or support material as claimed in claim 25 having a specific surface area of at least 31 m²/g after exposure to a temperature of 1400°C 1 hour.

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